

How to assess FAIRness to improve crediting and rewarding processes for data sharing? A step forward towards an extensive assessment grid.



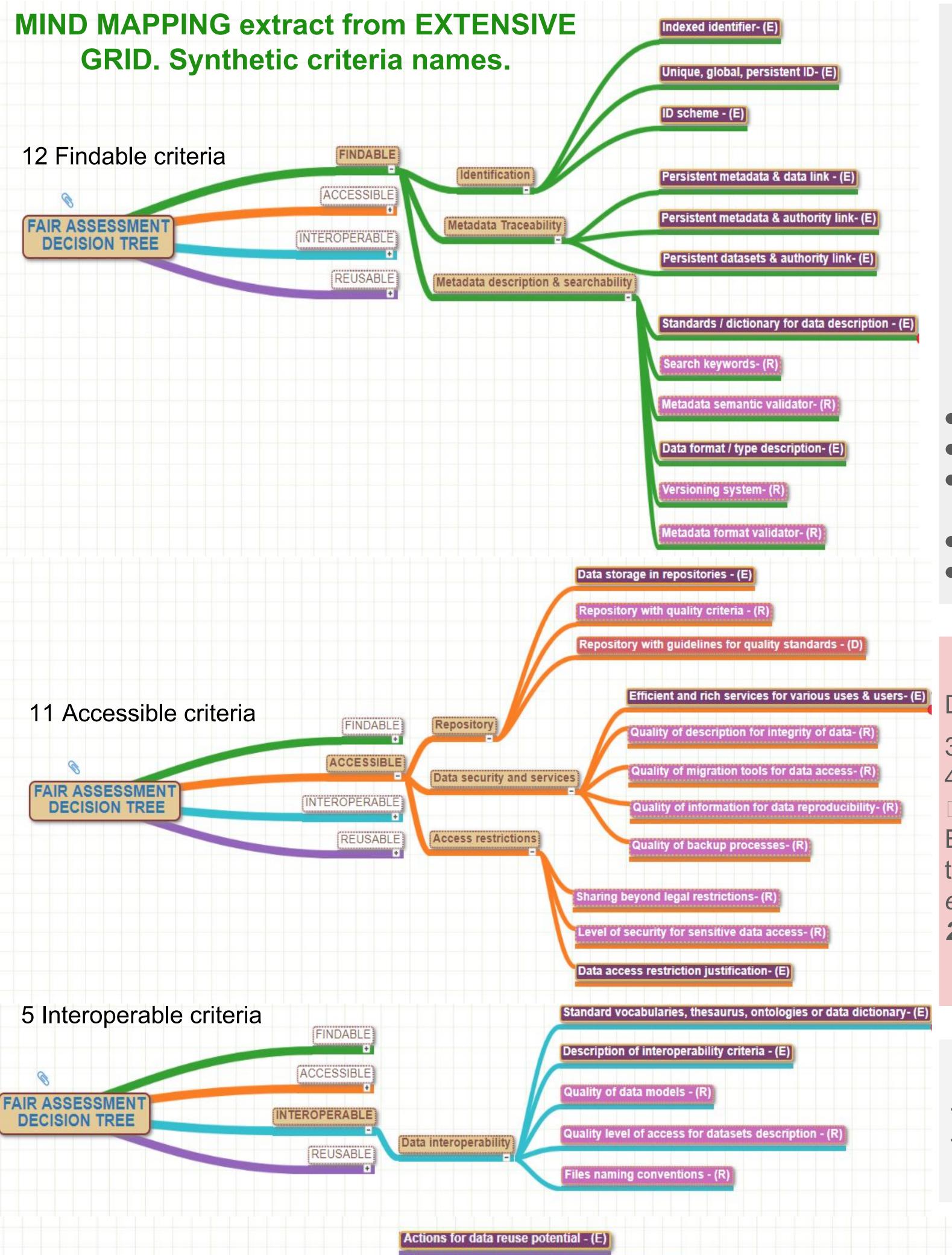
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FAIRplus

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In order to foster data sharing, the RDA-SHARC (SHAring Rewards & Credit) interest group has been set up to unpack and improve crediting and rewarding mechanisms in the data/resources sharing process.

As part of the objectives, one extensive FAIRness external assessment grid is being developed using criteria to establish if data are compliant to the FAIR principles (Findable/Accessible/Interoperable/Reusable). The objective is to promote a FAIRness literacy to improve scientists sharing behaviours.



BUILDING 1st DRAFT OF AN EXTENSIVE FAIRNESS ASSESSMENT GRID

The grid displays a mind-mapped tree-graph structure based on previous works on FAIR data management (Reymonet et al., 2018; Wilkinson et al., 2016; Wilkinson et al., 2018; and E.U.Guidelines about FAIRness DMPs*). The criteria used are based on the work from FORCE 11*, and on the basis of the Open Science Career Assessment Matrix designed by the EC Working group on Rewards under Open science.

MAIN PROPERTIES to be generic and trans-disciplinary:

- As simple as possible (understandable by non IT people),
- Step by step processes,
- Easy to complete (due to FAIR skills availability in evaluation) processes),
- Based on information given by researchers in career activity reports,
- Creative Commons author license.

ASSESSMENT PROCESS

Designed as a decision tree in each FAIR Principle

3 Levels of criterion importance : essential / recommended / desirable 4 possible answers/criteria (only one answer per criteria):

Never/NA | If Mandatory | Sometimes | Always

Evaluation based on scoring each answer for each possible answer in the 4 FAIR principle

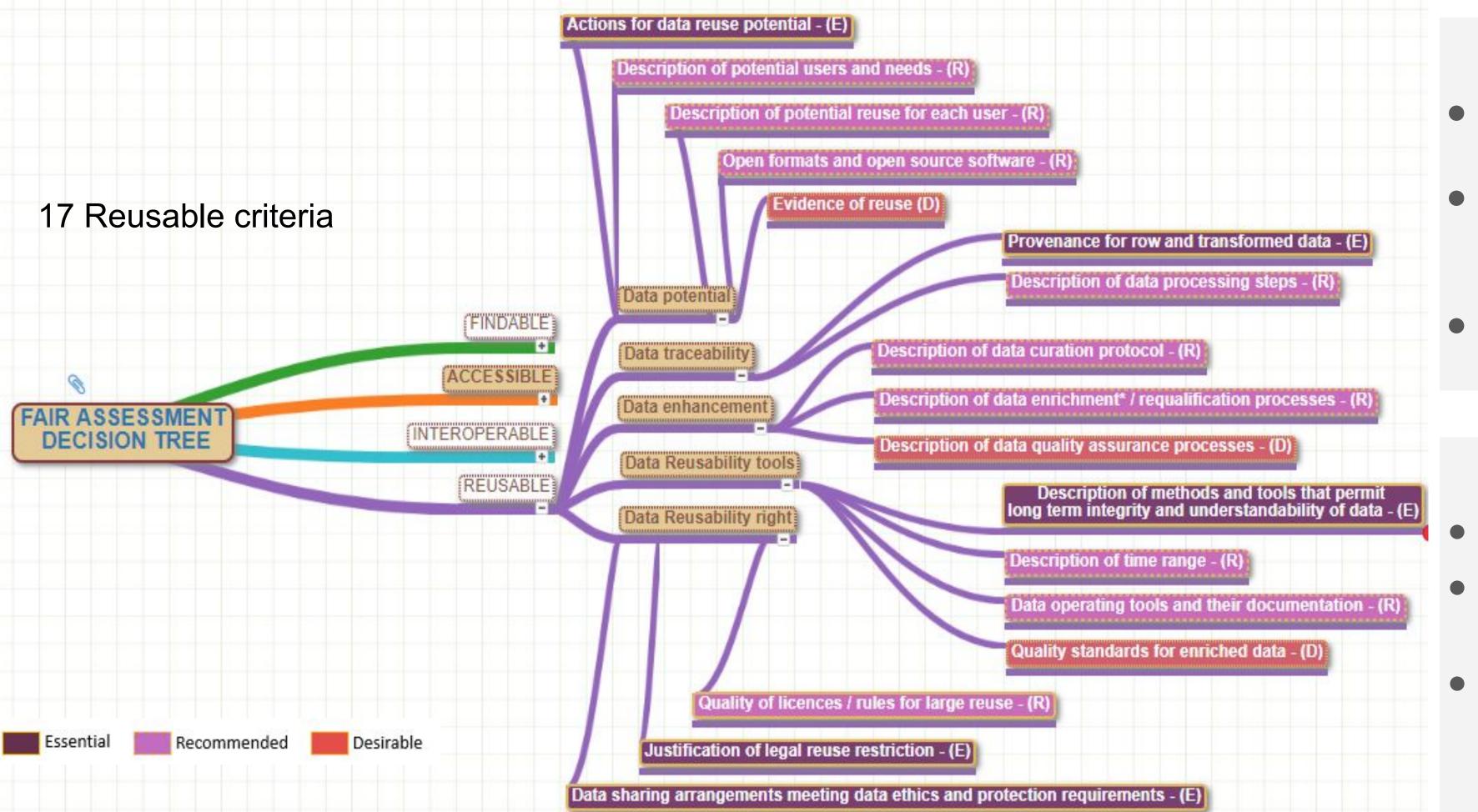
ex: for Findable

2/8 Never/NA; 3/8 If Mandatory; 1/8 Sometimes; 2/8 Always (Total = 8).

Recommendations based on this scoring.

LESSONS LEARNT FROM FIRST TESTS

- Essential criteria are not always understandable without training.
- Implementation of some criteria can be time consuming and may need some technical advisor / operator support.



* Reymonet N et al. (2018). Réaliser un plan de gestion de données « FAIR » : modèle. (sic 01690547v2)

POSSIBLE OPEN ISSUES

- Develop gradual assessment of <u>researcher FAIRness</u> <u>literacy</u>,
- Help identifying needs to build FAIRness guidelines for a better researcher sharing capacity (based on rewards and credits / How to do and Step by step tools),
- Develop step by step curation processes for FAIRness compliance implementation.

NEXT STEPS

- RDA P13 Sharc's session: please attend!
- A crowd sourced paper on FAIR criteria evaluation with open contribution from interested Working Groups in RDA community
- Tool testing in specific networks and in various scientific communities (IMI FAIRplus/Elixir community; BiodiFAIRse, Belmont-PARSEC, Citizen science networks, agronomy community...)

INPUT NEEDED FROM RESEARCH COMMUNITIES

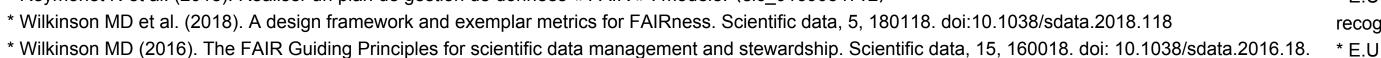
To implement a fair appraisal of the sharing process, appropriate criteria must be selected in order to design optimal generic assessment grids. This process requires involvement, time and input from volunteer data producers / users / scientists in various fields. The aim is to get feedback from a larger community as to the validity of the criteria over different fields.

A survey was launched in April 2019 to assess the usability and the validity of the decision tree and the corresponding grid. If you produce or use data, please participate in the development of the FAIRness assessment grids by completing the online questionnaire. It will help you get credit back for your efforts!

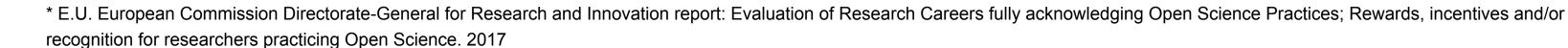
HUW? Join the SHARC RDA community

and the SHARC interest group at www.rd-alliance.org/groups/sharing-rewards-and-credit-sharc-ig

You will then be informed in due time.







^{*} E.U. European Commission Directorate-General for Research and Innovation report: H2020 Programme Guidelines on FAIR Data Management in Horizon 2020, Version 3.0, 26 July 2016



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